

Remarks

Claims 1-24 are pending in the application.

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by Ofek (US Patent No. 6,735,199, hereinafter "Ofek '199").

Claims 11-23 are rejected under 35 U.S.C. §102(e) as being anticipated by Ofek et al. (US Patent No. 6,973,090, hereinafter "Ofek '090").

Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ofek'090 in view of Ofek '199.

Each of the various rejections and objections are overcome by amendments that are made to the specification, drawing, and/or claims, as well as, or in the alternative, by various arguments that are presented.

Entry of this Amendment is proper under 37 CFR §1.116 since the amendment: (a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) satisfies a requirement of form asserted in the previous Office Action; (d) does not present any additional claims without canceling a corresponding number of finally rejected claims; or (e) places the application in better form for appeal, should an appeal be necessary. The amendment is necessary and was not earlier presented because it is made in response to arguments raised in the final rejection. Entry of the amendment is thus respectfully requested.

Any amendments to any claim for reasons other than as expressly recited herein for the purpose of distinguishing such claim from known prior art are not made with an intent to change in any way the literal scope of such claims or the range of equivalents for such claims. They are being made simply to present language that is better in conformance with the form requirements of Title 35 of the United States Code or is simply clearer and easier to understand than the originally presented language. Any amendments to any claim expressly made in order to distinguish such claim from known prior art are made only with an intent to change the literal scope of such claim in the most minimal way, i.e., simply to avoid the prior art in a way that leaves the claim novel and

not obvious in view of the cited prior art, and no equivalent of any subject matter remaining in the claim is intended to be surrendered.

Also, because a dependent claim inherently includes the recitations of the claim or chain of claims from which it depends, it is submitted that the scope and content of any dependent claims that have been herein rewritten in independent form is exactly the same as the scope and content of those claims prior to having been rewritten in independent form. That is, although by convention such rewritten claims are labeled herein as having been "amended," it is submitted that only the format, and not the content, of these claims has been changed. This is true whether a dependent claim has been rewritten to expressly include the limitations of those claims on which it formerly depended or whether an independent claim has been rewritten to include the limitations of claims that previously depended from it. Thus, by such rewriting no equivalent of any subject matter of the original dependent claim is intended to be surrendered. If the Examiner is of a different view, he is respectfully requested to so indicate.

Rejection Under 35 U.S.C. §102

Claims 1-10

Claims 1-10 are rejected under 35 U.S.C. §102(e) as being anticipated by Ofek Ofek '199. The rejection is traversed.

Ofek '199 discloses a time frame switching method and system that utilize a global common time reference signal. Specifically, the portions of the reference cited by the Office Action explain that predefined time frames within a repeating time cycle are associated with a common time reference signal. The time cycles repeat, the pre-assigned frames repeat, and switches assigned to frames operate in a mode consistent with such repetition. However, Ofek '199 fails to teach or suggest at least "generating at least one trigger; and in response to a generated trigger, transmitting and receiving data according to the global timing schedule," as recited in independent claim 1.

The Examiner asserts that the above-named elements are disclosed in Ofek '199. Specifically, the Examiner reasons that because a trigger is an application or device that activates or releases or causes something to happen, "the time assignment controller that assigns selected pre-defined time for transmitting and receiving data from each switch

responsive to the common time reference signal is considered as the same function” as “in response to a generated trigger, transmitting and receiving data according to the global timing schedule” (see Office Action, page 2). Applicants disagree with such an interpretation.

The Examiner interprets the common reference time of Ofek ‘199 to anticipate Applicants’ global timing schedule. A plain meaning of a “schedule” is a reference (plan) that includes sequence of operations (actions, events, or the like) and time allotted for each such operation (action, event, or the like) indicating when the operation (action, event, or the like) should occur. Therefore, because the Examiner interprets the common reference time as the global timing schedule, generating the common time reference of Ofek ‘199 must include assigning “selected pre-defined time for transmitting and receiving data from each switch,” otherwise the common reference time may not be considered as a schedule.

However, Applicants’ claim 1 includes three separate steps, namely:

- generating a global timing schedule for synchronizing the communication between the communications devices;
- generating at least one trigger; and
- in response to a generated trigger, transmitting and receiving data according to the global timing schedule.

Anticipation requires the disclosure in a single prior art reference of each and every element of the claimed invention arranged as in the claim. Accordingly, because assigning “selected pre-defined time for transmitting and receiving data from each switch” is a necessary part of generating the common reference time (Applicants’ step of generating a global timing schedule) the same action cannot anticipate the other steps of Applicants’ claim 1, especially because these steps involve a different element, a trigger. It follows from the Examiner’s interpretation that the trigger and the global timing schedule are one element, when they are not. As disclosed in the Specification regarding one of the embodiments, the global timing schedule is generated at regulated intervals and is a dynamic parameter whose total time duration and interval time may be adjusted according to the latency desired in a specific network (see paragraph [0031]). Only after the global timing schedule has been generated, counters synchronized to a specific count,

and the counters counted to a predetermined count at least one trigger is generated (see paragraph [0032]).

Therefore, Ofek '199 fails to disclose each and every element of the claimed invention, as arranged in Applicants' independent claim 1. Accordingly, independent claim 1 is not anticipated by Ofek '199 and is allowable under 35 U.S.C. §102. Because all of the dependent claims depending from the independent claims include all the limitations of the respective independent claim from which they ultimately depend, each such dependent claim is also not anticipated by Ofek '199.

Therefore, Applicants' claims 1-10 are allowable under 35 U.S.C. §102. The Examiner is respectfully requested to withdraw the rejection.

Claims 11-23

Claims 11-23 are rejected under 35 U.S.C. §102(e) as being anticipated by Ofek '090. The rejection is traversed.

First, the Examiner disagreed with the Applicants argument that Ofek '090 reference fails to teach or suggest at least "a transmit trigger generator for receiving the signal from said counter and in response, generating a transmit trigger signal." Specifically, the Examiner states that "Fig. 1 shows that the data unit counter (6023) sends signals (D-frame, D-cycle, D-control, etc.) to the Delineation controller (6021)" (see Office Action, page 2). The Applicants do not dispute this statement. However, when Examiner interprets the above-named elements of Applicants claim 11, the Examiner equates the Applicants' transmit trigger generator with the Transmit Delineation Controller 6011 not with the Receive Delineation Controller 6021 of Ofek '090 (see Office Action, page 5). Further, the portion that the Examiner cites, namely Col. 20, lines 37-40, mentions only the Transmit Delineation Controller 6011, not the Receive Delineation Controller 6021. Therefore, it is irrelevant whether Data Unit Counter (6023) sends signals to the Receive Delineation Controller (6021), because it is not an element that is interpreted to anticipate the Applicants' transmit trigger generator.

Ofek '090 discloses that responsive to common time reference the Transmission Delineation Controller (6011) generates delimiter signals indicating to the Serial Transmitter 6012 to insert control information in the data flow (see col. 20, lines 51-53;

col. 22 lines 1-4). As evidenced by Fig. 1, the Transmit Delineation Controller (6011) is a part of output port 1100 (left part of Fig. 1) while the Data Unit Counter is a part of input port 900 (right part of Fig. 1). Data moves in one direction only, from the output port (left part of Fig. 1) to the input port (right part of Fig. 1) via communication channel 920, which is represented by an arrow aimed towards the input port 900 from the output port 1100. Accordingly, the Ofek '090 reference teaches that signals or data could be transported only from the Transmission Delineation Controller (6011) to the Data Unit Controller (6023), and thus, cannot be transported from the Data Unit Controller (6023) to the Transmission Delineation Controller (6021).

This arrangement is entirely different from the Applicants' claimed arrangement where the claimed signal transmission occurs in a direction opposite to the one taught by Ofek '090. Specifically, the signal is sent from the counting device to the transmit trigger generator. Anticipation requires the disclosure in a single prior art reference of each and every element of the claimed invention arranged as in the claim. Therefore, because Ofek '090 fails to teach or suggest each and every Applicants' element as arranged as in claim 11, Ofek '090 fails to anticipate Applicants' claim 11.

Second, the Ofek '090 reference fails to teach or suggest at least "a transmit memory manager for receiving the receive trigger signal from said receive trigger generator and, in response, directing at least portion of said data stored in said memory device to a transmission device for transmission of said data," as recited in independent claim 1 (emphasis added). The Examiner equates a Serial TX Transmitter 6012 of Ofek '090 with the Applicants' transmit memory manager, while an Alignment Subsystem 6600 of Ofek '090 with Applicants' transmit memory device.

Ofek' 090 discloses that the Serial TX Transmitter 6012 sends data units and control information over the communication channel 920 between the output port 900 and input 1100 port (see col. 20, lines 40-43). Ofek' 090 further discloses that the Alignment Subsystem 6600 may store the data units received from the communication channel 920 (see col. 20, lines 47-48). However, Ofek' 090 does not teach or suggest that the Serial TX Transmitter 6012 directs at least a portion of the data units stored in the Alignment Subsystem 6600 to a transmission device. In contrast, Ofek '090 teaches that the Alignment Subsystem 6600 itself sorts the data units, while the Delineation

Controller 6021 generates select-in signals 1410 enabling the Alignment Subsystem 6600 to determine which data units should be stored together (see col. 20, lines 49-50; col. 23, line 64 – col. 24, line 4). Accordingly, the Ofek '090 reference fails to teach or suggest every element of Applicants' claim 1.

Accordingly, independent claim 11 is not anticipated by Ofek '090 and is allowable under 35 U.S.C. §102. Claim 19 recites relevant limitations similar to those recited in independent claim 11 and, as such, and at least for the same reasons as discussed above, these independent claim is not anticipated by Ofek '090 and is allowable under 35 U.S.C. §102.

Because all of the dependent claims depending from the independent claims include all the limitations of the respective independent claim from which they ultimately depend, each such dependent claim is also allowable over Ofek '090.

Therefore, Applicants' claims 11-23 are allowable under 35 U.S.C. §102. The Examiner is respectfully requested to withdraw the rejection.

Rejection Under 35 U.S.C. §103(a)

Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Ofek '090 in view of Ofek '199. The rejection is traversed.

This ground of rejection applies only to a dependent claim, and is predicated on the validity of the rejection under 35 U.S.C. §102 given Ofek '090. Because the rejection under 35 U.S.C. §102 given Ofek '090 has been overcome, as described hereinabove, and there is no argument put forth by the Office Action that Ofek '199 supplies that which is missing from Ofek '090 to render the independent claims anticipated, these grounds of rejection cannot be maintained.

Therefore, Applicants' claim 24 is allowable under 35 U.S.C. §103(a). The Examiner is respectfully requested to withdraw the rejection.


Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

If, however, the Examiner still believes that there are unresolved issues, the Examiner is invited to call Eamon Wall at (732) 530-9404 so that arrangements may be made to discuss and resolve any such issues.

Respectfully submitted,

Dated: 2/28/08



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